

From long exposure to atmospheric influence, and other causes, the shells have become disintegrated, and readily crumble on free exposure to the air. Again, after the lapse of a considerable period, they become very much disorganized by another process. At first a little moss forms on the surface of the shells; this takes up enough lime that has been dissolved by the carbonic acid of the atmosphere to give support to a higher order of vegetation. This vegetation, by its decay, furnishes food for a succeeding generation of plants, and by an increased supply of carbonic acid dissolves more lime to supply another generation. This, in its turn, dying, furnishes increased means for the solution of the shell, until in many cases these banks are covered with the most luxuriant vegetation, and support large trees. The layer of matter covering the shells is called "shell mould," and consists of shells in a very comminuted state, and the organic and inorganic remains of the plants to which it owes its formation. A little reflection will at once show, that this mould must prove a most valuable manure, being nothing but the remains, the ashes, so to speak, of plants, mixed with a large quantity of oyster shells, in a very minute state of division.

This mould contains of air-slaked lime, by the average of 25 different analyses, about 45.6 per cent. being more than half as good as common agricultural lime; and when we also consider the other matters in this mould, the ratio to limestone is much increased. It is almost needless to say that the lime in this *mould* is identical with that in limestones, fresh shells, &c., and will act equally as well. A custom has prevailed, to a very injurious extent, of applying the mould together with quantities of large, coarse fragments of shells. I cannot too strongly reprobate this mode of using the banks. These large fragments take up much space in the soil that should be filled by other matter, injure its texture, and render the crops grown on it very liable to *burn* or *fire*. Though these shells be composed of lime, it is not available, but in a very slight degree, to the use of crops. Lime, to be serviceable, must be in the state of very fine powder, and intimately incorporated with the soil. When it exists in shells of any size, it does almost no good by its presence, and, as I have before said, *injures* the texture of the soil. For all present practical purposes, pebble stones would be equally beneficial.

The best way to use these shell banks is to have a sieve fixed with a slight inclination. Against this the shells should be thrown, as when persons wish to free sand from gravel. The fine particles which pass through the sieve should be applied as they are, whilst the coarse shells which do not pass through, should be put into kilns and burnt. In this way no part of these valuable deposits would be lost; all would be saved for agricultural improvement, thereby increasing the quantity of crops, and augmenting the value of land, instead of retarding its improvement, as is the case when